

USSN: 10/079,685
Atty. Docket No.: 10256A
Amdt. dated January 5, 2004
R ply to Office Action of October 3, 2003

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior versions of claims in this Application:

Listing of Claims:

Claim 1 (currently amended): A thermoplastic multi-layer film for forming hermetic seals on packages comprising:

(a) a core layer [B] comprising polypropylene and a softening additive having a thickness of 5 microns to 25 ;

(b) a sealant layer [C] comprising a copolymer having a thickness of 5 microns to 10 microns.

Claim 2 (currently amended): The film of claim 1, wherein the copolymer of the sealant layer [C] is selected from the group consisting of ethylene-propylene copolymer, ethylene-propylene-butene-1 terpolymer, propylene-butene copolymer, and mixtures thereof.

Claim 3 (currently amended): The film of claim 1 further comprising at least one additional layer [A] comprising a material selected from the group consisting of high density polyethylene, medium density polyethylene, and mixtures thereof.

Claim 4 (currently amended): The film of claim 1 wherein the softening additive in the core layer [B] comprises a material selected from the group consisting of ethylene-propylene copolymers, terpolymers, thermoplastic hydrocarbons, hydrocarbon resins, and cyclopentadiene hydrocarbon.

Claim 5 (currently amended): The film of claim 1 wherein the softening additive in the core layer [B] comprises a hydrocarbon resin.

Claim 6 (currently amended): The film of claim 1 wherein the softening additive in the core layer [B] comprises cyclopentadiene hydrocarbon.

USSN: 10/079,685

Atty. Docket No.: 10256A

Amdt. dated January 5, 2004

Reply to Office Action of October 3, 2003

Claim 7 (currently amended): The film of claim 1 wherein the softening additive in the core layer [B] comprises from about 2% to about 15% by weight of the core layer[B].

Claim 8 (currently amended): The film of claim 5 wherein the softening additive in the core layer [B] comprises from about 2% to about 15% by weight of the core layer[B].

Claim 9 (currently amended): The film of claim 6 wherein the softening additive in the core layer [B] comprises from about 2% to about 15% by weight of the core layer[B].

Claim 10 (canceled)

Claim 11 (original): The film of claim 1, wherein the thickness of the film is from about 17 microns to about 31 microns.

Claim 12 (currently amended): The film of claim 3, wherein the thickness of the film is from about 17 microns to about 31 microns[; the layer C thickness is from about 5 microns to about 10 microns; the layer B thickness is from about 5 microns to about 25 microns;] and the at least one additional layer [A] thickness is from about 1 micron to about 10 microns.

Claim 13 (original): The film of claim 1, wherein the film is biaxially oriented.

Claim 14 (original): The film of claim 1, wherein the film is uniaxially oriented.

Claim 15 (original): The film of claim 1, wherein the film is hermetically sealable in a machine for making packaging bags with a combination of a fin seal and crimp seals or a combination of a lap seal and crimp seals.

Claim 16 (currently amended): The film of claim 3, wherein the at least one additional layer [A] is metallized.

USSN: 10/079,685
Atty. Docket No.: 10256A
Amdt. dated January 5, 2004
Reply to Office Action of October 3, 2003

Claim 17 (currently amended): The film of claim 3, wherein the at least one additional layer [A] comprises high density polyethylene.

Claim 18 (currently amended): The film of claim 3, wherein the at least one additional layer [A] comprises medium density polyethylene.

Claim 19 (currently amended): The film of claim 3 further comprising a coating applied to the at least one additional layer [A].

Claim 20 (currently amended): A thermoplastic multi-layer film for forming hermetic seals on packages comprising:

- (a) a core layer [B] comprising polypropylene and a softening additive wherein the core layer [B] has a first side and a second side;
- (b) a sealant layer [C] comprising a copolymer wherein the sealant layer [C] has a first side and a second side, wherein the first side of the sealant layer [C] is adjacent to the second side of the core layer [B].

Claim 21 (currently amended): The film of claim 20 further comprising at least one additional layer [A] comprising a material selected from the group consisting of high density polyethylene, medium density polyethylene, and mixtures thereof wherein the at least one additional layer [A] has a first side and a second side wherein the second side of the at least one additional layer [A] is adjacent to the first side of the core layer [B].

Claim 22 (original): A method of producing a thermoplastic multi-layer film comprising the steps of:

- (a) coextruding a first layer comprising; a second layer comprising polypropylene and a softening; and a third layer comprising a copolymer;
- (b) orienting the film in the machine direction at an elevated temperature.

USSN: 10/079,685

Atty. Docket No.: 10256A

Amdt. dated January 5, 2004

Reply to Office Action of October 3, 2003

Claim 23 (original): The method of claim 22 further comprising the step of orienting said film in the transverse direction at an elevated temperature.

Claim 24 (original): The method of claim 22 further comprising the step of corona said third layer.

Claim 25 (original): The method of claim 22 further comprising the step of flame treating said third layer.

Claim 26 (original): The method of claim 22 further comprising the step of plasma treating said third layer.

Claim 27 (original): The method of claim 22 further comprising the step of priming said third layer.

Claim 28 (original): The method of claim 22 wherein the film produced has a MST below 170 degrees fahrenheit.

Claim 29 (original): The film of claim 1 wherein the film has a MST below 170 degrees fahrenheit.